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THE RELATIONAL EFFECT UNIVERSITY MOMENTUM HAS ON
PHILANTHROPIC SUPPORT

by

Jon D. North

Dissertation

Submitted to the Faculty of

Olivet Nazarene University

School of Graduate and Continuing Studies

in Partial Fulfillment of the Requirements for

the Degree of

Doctor of Education

in

Ethical Leadership

May 2016

THE RELATIONAL EFFECT UNIVERSITY MOMENTUM HAS ON
PHILANTHROPIC SUPPORT

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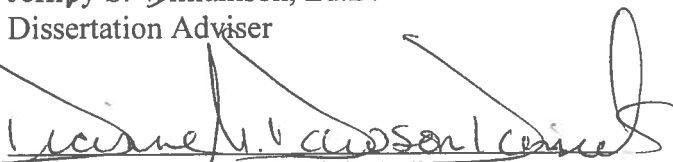
Jon D. North

Dissertation



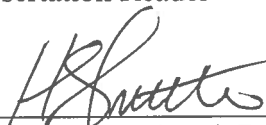
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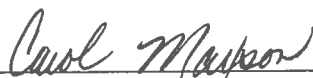
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DEDICATION

To the people I love most in the world:

Faith

Drake, Faith, Lexie, Hayden, and Audrey

Mom and Dad

My extended family.

You are all greatly loved and appreciated!

ABSTRACT

Higher Education in the United States is a complex industry with fierce competition. A university's success and momentum are impacted by numerous internal and external factors. The level of an institution's philanthropic support often mirrors the level of its overall success. Concerns exist over the continued financial affordability of Christian higher education for students. Prior research has identified a correlation between various institutional characteristics and the generation of philanthropic support. Based on the literature review, the following characteristics were studied to determine their ability to predict alumni giving: enrollment, endowment balance, financial responsibility score, graduation rate, institutional age, presidential tenure, retention rate, student debt, student loan default rate, and student selectivity. This study reinforced an idea evident throughout the literature, that institutional characteristics in higher education are often highly correlated with one another. Success in one area of an institution will likely predict success in another area as well. This study revealed graduation rate as the strongest predictor of alumni giving among the study sample. Student debt and institutional size were also significant predictors of alumni giving rate. University administrators and boards might benefit from using these results to guide strategic planning efforts and to train faculty and staff of the significant correlations between these and other variables that affect university momentum and alumni giving.

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CHAPTER I

INTRODUCTION

The future viability of private Christian higher education is increasingly at risk. Private philanthropic support has and will continue to play a key role in the sustainability and growth of Christian universities in America. “No single force is more responsible for the emergence of the modern university in America than giving by individuals and foundations” (Hall, 1992, p. 404).

A university’s success and momentum are impacted by numerous internal and external factors. The level of an institution’s philanthropic support often mirrors the level of its overall success and momentum. Many of the characteristics that impact philanthropic support are not under the direct influence of a university’s advancement staff. The more university boards and administrators understand and acknowledge these relationships, the more targeted their strategic and operational plans can be to capitalizing on them (Gunsalus, 2005). Others have supported this view:

It becomes a catch-22 for institutions. Donors prefer to give to successful programs but universities need the funds initially to create the success. In addition, many programs and research projects require several years before fruition, creating a lag effect between donation and success. Furthermore, institutions must continually find new programs that spark the interest of donors. (Terry & Macy, 2007, pp. 3-4)

Private gift income continues to be a vital part of a university's total revenue. For the 2011 academic year, \$22,061,064,000 in private funding was given to private four-year colleges and universities in the United States. This represented 10.68% of the total revenue of \$206,577,101,000 generated by these institutions. Over a 10-year period from 2001 to 2010, the average private revenue per full-time equivalent (FTE) student dropped by 25% from \$8,049 to \$6,016. Tuition and fee revenue for the same period grew 18.79% from an average of \$15,802 per FTE student to \$18,770 (National Center for Educational Statistics, 2014).

American higher education is a complex industry with fierce competition. Countless variables influence an institution's programmatic outcomes and financial health. Prior research has identified a positive correlation between various institutional characteristics and the generation of philanthropic support (Gunsalus, 2005; Lee, 2008). The identification of characteristics that positively influence an institution's alumni giving, would greatly assist university administrators in prioritizing strategic initiatives. Creating and capitalizing on various types of institutional momentum could significantly enhance a university's ability to raise philanthropic support.

According to the Voluntary Support of Education (VSE) survey, 25% of all private contributions to colleges and universities are from alumni (Council for Aid to Education, 2014). The significance of this support cannot be overlooked. Institutions must address this issue from two fronts, (a) an institution must seek to maximize an individual's student experience while they are on campus, and (b) an institution must succeed in meaningfully engaging individuals after they graduate.

An alumni's choice to give is often impacted by their experience as a student. For example, Gunsalus (2005) determined that a university's student to faculty ratio and first year retention rates were predictors of alumni giving. At its basic level, students evaluate the value proposition of their higher education experience. It is up to the university to measure their institutional value proposition and work to improve it (Powell, Gilleland, & Pearson, 2012).

Colleges and universities must continue to work to engage their alumni in meaningful ways. The more successful an institution is in engaging the alumni base, the more support they will receive (Chung-Hoon, Hite, & Hite, 2007). A research study conducted by Wunnava and Okunade (2013) determined that alumni who participate in alumni activities donate 20.5% more, on average, than alumni who do not participate.

Momentum can be widely recognized in everyday life. Whether watching a sporting event, the growth of a products brand loyalty, or a presidential election. Jansen (2004) discussed the relevance of momentum on organizational success. "The concept of momentum is especially relevant to the study of organizational change, because this energy and enthusiasm is seen as an essential ingredient when pursuing a new course of action" (p. 276). For the purposes of this study, the following Merriam-Webster (2014) definition of momentum is used: "the strength or force that allows something to continue or to grow stronger or faster as time passes" (para. 1).

Statement of the Problem

Concerns exist over the continued financial affordability of Christian higher education for students (Curry, Rodin, & Carlson, 2012). Fundraising plays a key role in maintaining and strengthening institutional financial health and viability. Fundraising

success is critical for institutions to maintain and grow enrollment while offering academic excellence (Lee, 2008). The identification of institutional characteristics that help to explain the generation of philanthropic giving will assist private Christian universities to improve their fundraising efforts and college affordability (Lee). The relationship between university momentum and philanthropic giving, among private Christian universities in America, has not been well researched (Lee).

The purpose of this research was to examine the relationship between university momentum and philanthropic giving in order to assist university boards, administrators, and faculty in identifying those institutional characteristics that predict fundraising success. The researcher sought to further study the effects of institutional age and size on these data.

Background

The quality of a student's college experience has a direct impact on their desire to philanthropically support the university as an alumnus (McDearmon & Shirley, 2009). Students gauge their overall experience based on factors that occurred as students and on factors that occur after their time on campus. For example, the better a university does in the areas of job placement and careers services the more likely alumni will choose to make charitable contributions to the institution (McDearmon, 2010).

Positive faculty-to-student and student-to-student interactions and relationships, as well as a strong, well organized curriculum helps to increase student motivation and learning outcomes (Vermeulen & Schmidt, 2008). Vermeulen and Schmidt concluded that, "learning outcomes are related to career success, especially at the initial phase of

graduates' careers. Success in both initial and subsequent phases of graduates' careers is affected by the extra-curricular activities students were involved in" (p.446).

The individualized attention students receive from faculty members can have an impact on their desire to support the institution after graduation. Faculty-to-student ratios have been proven to be predictive of alumni giving (Gunsalus, 2005). A lower faculty-to-student ratio has also been proven to improve a university's graduation rate (Raikes, Berling, & Davis, 2012). Evidence suggests that the limited interactions experienced between faculty and their students through online courses result in low alumni giving compared to students who attend traditional classroom courses (Tiger & Preston, 2013).

There are many factors that have been proven to influence alumni giving. For example, an increase in non-alumni giving will have a positive impact on alumni giving (Gottfried, 2008).

That is, crowd-in effects of donations do exist – in public schools, in private schools, and in the aggregate. Although the sizes and magnitudes differ depending on the sample size evaluated, the message is consistently clear throughout: donative behavior inspires further donative behavior. (Gottfried, p. 69)

Alumni giving increases with a student's belief that the institution is in need and that it is worthy of support. Alumni donors need and want to understand the outcome of each gift given (Weerts & Ronca, 2009). Unfortunately, some alumni view their college experience and consequently the institution as a commodity, not a charity. They do not understand that the institution can and should need their philanthropic support (Wastyn, 2009). It is up to university administrators and faculty to consistently make the case for support.

Research Questions

1. Which institutional characteristics, if any, are predictive of philanthropic support?
2. What effect, if any, does enrollment size have on the prediction of philanthropic support?
3. What effect, if any, does institutional age have on the prediction of philanthropic support?

Description of Terms

Alumni giving rate.

The average percentage of undergraduate alumni of record who donated money to the college or university. Alumni of record are former full- or part-time students who received an undergraduate degree and for whom the college or university has a current address. Graduates who earned only a graduate degree are excluded.

(U. S. News and World Report; How to Calculate, 2014, para. 8)

Composite Financial Index. Composite Financial Index (CFI), a metric unique to higher education, is a tool that helps monitor and communicate financial health and risks (National Association of College and University Business Officers, 2014).

Council of Christian Colleges and Universities.

The Council for Christian Colleges & Universities (CCCCU) is a higher education association of 180 Christian institutions around the world. The 119 member campuses in North America are all fully accredited, comprehensive colleges and universities with curricula rooted in the arts and sciences. In addition, 61 affiliate campuses from 20 countries are part of the CCCC. The CCCC encompasses 35 Protestant denominations, as well as the Catholic church, in its membership. The

CCCU is a tax-exempt 501(c)(3) nonprofit organization headquartered in the historic Capitol Hill district of Washington, DC. (Council for Christian Colleges & Universities, 2014, para. 1)

Endowment Balance. “The combined endowment (true endowment, term endowment, and quasi-endowment) of the institution and supporting foundation” (Council for Aid to Education, 2013, p. 38).

Enrollment. “Opening fall enrollment figures for the academic year covered by the survey” (Council for Aid to Education, 2013, p. 38).

Federal Student Aid.

Federal Student Aid, a part of the U.S. Department of Education, is the largest provider of student financial aid in the nation. At the office of Federal Student Aid, our 1,200 employees help make college education possible for every dedicated mind by providing more than \$150 billion in federal grants, loans, and work-study funds each year to more than 15 million students paying for college or career school. We are proud to sponsor millions of American minds pursuing their educational dreams. (Federal Student Aid; Who Are We, n.d., para. 1)

First-time First-year Student.

A student attending any institution for the first time at the undergraduate level. Includes students enrolled in the fall term who attended college for the first time in the prior summer term. Also includes students who entered with advanced standing or college credits earned before graduation from high school. (Integrated Postsecondary Education Data System; Glossary F, n.d., para.18)

Financial Responsibility Composite Scores.

Section 498(c) of the Higher Education Act of 1965, as amended, requires for-profit and non-profit institutions to annually submit audited financial statements to the Department to demonstrate they are maintaining the standards of financial responsibility necessary to participate in the Title IV programs. One of many standards, which the Department utilizes to gauge the financial responsibility of an institution, is a composite of three ratios derived from an institution's audited financial statements. The three ratios are a primary reserve ratio, an equity ratio, and a net income ratio. These ratios gauge the fundamental elements of the financial health of an institution, not the educational quality of an institution. (Federal Student Aid; Financial Responsibility Composite Scores, n.d., para. 1)

Graduation Rate.

This annual component of IPEDS was added in 1997 to help institutions satisfy the requirements of the Student Right-to-Know legislation. Data are collected on the number of students entering the institution as full-time, first-time, degree/certificate-seeking undergraduate students in a particular year (cohort), by race/ethnicity and gender; the number completing their program within 150% of normal time to completion; the number that transfer to other institutions if transfer is part of the institution's mission. Before 2007, institutions that offered athletically related student aid were asked to report, by sport, the number of students receiving aid and whether they completed within 150% of normal time to completion. Now, these institutions only need to report a URL where the athletic data is located on their website, when available. GR automatically generates

worksheets that calculate rates, including average rates over 4 years. (Integrated Postsecondary Education Data System; Glossary G, n.d., para. 16)

Institutional Age. The age of an institution as of July 1, 2009, the midpoint of the study.

Integrated Postsecondary Education Data System.

The Integrated Postsecondary Education Data System (IPEDS) conducted by the National Center for Education Statistics. IPEDS began in 1986 and involves annual data collections. Survey questionnaires are sent to all postsecondary institutions eligible for federal student financial aid, as determined by the Office of Postsecondary Education, U.S. Department of Education. IPEDS also surveys approximately 4,000 schools that are not eligible for federal student aid using the Institutional Characteristics form only. (Integrated Postsecondary Education Data System; Glossary I, n.d., para. 37)

Momentum. “The strength or force that allows something to continue or to grow stronger or faster as time passes” (Merriam-Webster, 2014, para. 1).

Official Fall Reporting Date. “The date (in the fall) on which an institution must report fall enrollment data to either the State, its board of trustees or governing board, or some other external governing body” (Integrated Postsecondary Education Data System; Glossary O, n.d., para. 10).

Open Admission. “Admission policy whereby the school will accept any student who applies” (Integrated Postsecondary Education Data System; Glossary O, n.d., para. 14).

Presidential Tenure. For the purposes of this study the researcher has defined presidential tenure as the number of presidents an institution had from July 1, 1987 to June 30, 2012.

Private For-Profit Institution. “A private institution in which the individual(s) or agency in control receives compensation other than wages, rent, or other expenses for the assumption of risk” (Integrated Postsecondary Education Data System; Glossary P, n.d., para. 29).

Private Nonprofit Institution. “A private institution in which the individual(s) or agency in control receives no compensation, other than wages, rent, or other expenses for the assumption of risk. These include both independent nonprofit schools and those affiliated with a religious organization” (Integrated Postsecondary Education Data System; Glossary P, n.d., para. 34).

Public Institution. “An educational institution whose programs and activities are operated by publicly elected or appointed school officials and which is supported primarily by public funds” (Integrated Postsecondary Education Data System; Glossary P, n.d., para. 44).

Quasi-endowment. “funds given to the institution with no strings attached or surplus funds that have been added to the endowment fund” (Council for Aid to Education, 2013, p. 38).

Scholastic Aptitude Test (SAT). “An examination administered by the Educational Testing Service and used to predict the facility with which an individual will progress in learning college-level academic subjects” (Integrated Postsecondary Education Data System; Glossary S, n.d., para. 6).

Scholarships. “Grants-in-aid, trainee stipends, tuition and fee waivers, and prizes to undergraduate students” (Integrated Postsecondary Education Data System; Glossary S, n.d., para. 7).

Student engagement.

Student engagement represents two critical features of collegiate quality. The first is the amount of time and effort students put into their studies and other educationally purposeful activities. The second is how the institution deploys its resources and organizes the curriculum and other learning opportunities to get students to participate in activities that decades of research studies show are linked to student learning. (National Survey for Student Engagement, 2014, para. 1)

Student Loan Default Rate.

A 3-year cohort default rate is the percentage of a school's borrowers who enter repayment on certain Federal Family Education Loan (FFEL) Program or William D. Ford Federal Direct Loan (Direct Loan) Program loans during a particular federal fiscal year (FY), October 1 to September 30, and default or meet other specified conditions prior to the end of the second following fiscal year. (Federal Student Aid - Three-year Cohort Default Rates, n.d., para. 1)

Student Selectivity. For this study, student selectivity is based on standardized ACT admissions test scores collected by IPEDS (Integrated Postsecondary Education Data System; Glossary A, n.d., para. 14).

Term Endowment. “similar to the true endowment except that all or part of the funds may be expended after a stated period or upon the occurrence of a certain event as stated in the terms governing the funds” (Council for Aid to Education, 2013, p. 38).

True Endowment. “funds provided to the institution, the principal of which is not expendable by the institution under the terms of the agreement that created the fund” (Council for Aid to Education, 2013, p. 38).

Undergraduate. “A student enrolled in a 4- or 5-year bachelor's degree program, an associate's degree program, or a vocational or technical program below the baccalaureate” (Integrated Postsecondary Education Data System; Glossary U, n.d., para. 2).

Voluntary Support of Education survey. “The Voluntary Support of Education survey is designed to obtain information on the amounts, sources, donor–specified purposes, and forms of private gifts, grants, and bequests received by educational institutions” (Council for Aid to Education, 2013 P. 35).

Significance of the Study

Philanthropic support of higher education is becoming an integral part of an institution’s operational budget. Gone are the days when charitable support was raised for mainly capital campaigns and special projects. Reaching gift income budget targets is now a matter of university survival (Terry & Macy, 2007). With the recent national economic crisis, states have continued to lower their grant support for college students who are in the most need of financial assistance. As this funding has decreased, more philanthropic support is needed to fill the gap (Cheslock & Hughes, 2011).

Increasing and substantial external pressures on institutions of higher education will continue to demand better operational efficiencies and student learning outcomes. These pressures will only grow in the coming years. It will be important for university boards and administrators to assist their institutions in adapting to new industry realities. At times, private Christian universities face additional challenges and pressures. Some of these challenges can and do impact an institution's ability to fulfill its religious mission. It will be critical for university leaders to navigate the competing challenges that universities face while achieving academic excellence, high student satisfaction, and an engaged and supportive alumni base. Institutional momentum is key in establishing the wave of support needed to survive and thrive.

Process to Accomplish

This study used a quantitative approach to study the research questions. The study sample included all member schools of the CCCU as of June 30, 2012 for whom data were available. CCCU member schools, while diverse in many ways, have many consistent core characteristics that are of interest to the researcher. Pre-existing data was used for the study from four sources (a) the U.S. Department of Education, (b) Integrated Postsecondary Education Data System, (c) U. S. News and World Report College Ranking Survey, and (d) institutional websites.

The study used 10 independent variables and one dependent variable. The ten independent variables were (a) enrollment, (b) endowment balance, (c) financial responsibility score, (d) graduation rate, (e) institutional age, (f) presidential tenure, (g) retention rate, (h) student debt, (i) student loan default rate, and (j) student selectivity. The dependent variable was the institutional annual alumni giving rate. For all variables

expect presidential tenure, data was collected for each institution for six academic years from July 1, 2006 to June 30, 2012. Data to measure the independent variable of presidential tenure was collected from July 1, 1987 to June 30, 2012. Data for each variable was then averaged for each institution.

The researcher gained access to the data from the online data mining systems of each organization. All data in each system is accessible by the public. Because the data is preexisting and publicly accessible, some limited data beyond that which is mentioned in the study variables was collected to create greater institutional and industry context for the researcher. The annual undergraduate alumni giving rate for each institution was collected from the U. S. News and World Report's College Ranking Survey (U. S. News and World Report; College Compass, 2014).

Question 1: Which institutional characteristics, if any, are predictive of philanthropic support?

The researcher ran the mean and standard deviation for each independent variable. Additionally, all independent variables were analyzed using the regression equation to determine the model, or combination of variables, that best predict philanthropic giving. The results of the descriptive statistics and the regression analysis have been provided in table form in chapter four.

Question 2: What effect, if any, does enrollment size have on the prediction of philanthropic support?

The researcher then ran the mean and standard deviation for the independent variable of enrollment size. Additionally, the variable of enrollment size was analyzed using the regression equation to determine its ability to predict philanthropic giving. The

results of the descriptive statistics and the regression analysis have been provided in table form in chapter four.

Question 3: What effect, if any, does institutional age have on the prediction of philanthropic support?

The researcher then ran the mean and standard deviation for the independent variable of institutional age. Additionally, the variable of institutional age was analyzed using the regression equation to determine its ability to predict philanthropic giving. The results of the descriptive statistics and the regression analysis have been provided in table form in chapter four.

Summary

This research adds to the growing understanding of which institutional characteristics are predictive of alumni philanthropic support. Private institutions of various size and age will likely find this research helpful to their institutional advancement activities and overall strategic planning efforts. Higher education is a complex and ever-changing industry. University administrators and boards must diligently work to lead their institutions through the landmine of legislative forces, industry pressures and competing institutions. Public philanthropic support has been and will continue to be an important factor in the future success of all private Christian universities in America.

CHAPTER II

REVIEW OF LITERATURE

Introduction

The purpose of this literature review was to explore the relationship between university momentum and philanthropic giving. The review of literature included a series of institutional characteristics and their impact on fundraising success.

Fundraising

Private sector donations have played an important role in the establishment and growth of higher education in America and will play an even more vital role in its future sustainability and success. Institutions of all types and sizes are turning to private philanthropic support to meet ongoing budget demands. As state and federal governments continue to reduce support for college and university students, institutions will need to increase donations from individual donors to make up the difference (Drezner, 2011).

Universities across America are raising the bar for fundraisers year after year. According to a survey of 335 chief advancement officers in higher education, universities are seeking to increase donations by a median 16 % for fiscal year 2015 (Hall, 2014). Interpreting these results, Hall suggested the pressure, “stems from flat or declining revenue, with recent reports showing that revenue growth in higher education is not keeping pace with inflation” (para. 4).

Numerous institutional factors and characteristics influence a university's ability to raise charitable support (Gunsalus, 2005; Lee, 2008). According to Lee and Gunsalus, understanding the correlation between these characteristics and fundraising success can provide greater clarity and strategic focus for university administrators. University officials who effectively utilize these data can more accurately benchmark their university's performance among peers. As university administrators, faculty, and staff more clearly understand the correlation between these non-fundraising characteristics and fundraising success, the broader their sense of shared responsibility should be. Despite level or declining revenue growth in higher education, advancement offices are often being asked to substantially increase fundraising support (Hall, 2014).

Gunsalus (2005) stressed the importance of identifying institutional characteristics that are not directly related to fundraising, yet have a significant influence on alumni giving participation. For example, Gunsalus determined that freshman retention rates and university graduation rates were highly predictive of alumni giving participation rates. The author further expressed the importance for university boards to compare the fundraising success of their institution against that of other similar universities. University officials that understand the board factors influencing fundraising success can identify problem areas and implement corrective solutions. Consequently, alumni giving should increase by effectively addressing such problem areas.

Endowment growth among select American colleges and universities has increased the stratification of higher education institutions. According to Kimball and Johnson (2012), this stratification began in the period between 1890 and 1930; "endowment first acquired its meaning and significance in U.S. higher education between

1890 and 1930 as universities realize that their autonomy, stability, and comparative advantage over competitors depended heavily on the amount of their financial capital” (p. 1). As a result, many of the upper tier, resource rich universities in America today owe their good fortune to the endowment efforts of their early forefathers. While younger universities have a lot of catching up to do, it is important for university advancement offices to consistently promote endowment giving.

Lee (2008) concluded that the most statistically significant institutional factors affecting endowment growth were student SAT scores. The author made the further correlation between high student SAT scores and an institution’s student selectivity and prestige. Lee also concluded that enrollment levels, alumni satisfaction, alumni giving rates, and research and development expenditures were also statistically significant institutional factors influencing endowment growth.

According to Lo (2010), student satisfaction, and consequently alumni satisfaction, is directly related to the rate of a student’s perceived learning. Lo stated, “In a student-centered environment, students’ perceptions of what constitutes adequate intellectual challenge are situational; these perceptions must not be overlooked as instructors refine environments to facilitate learning” (p. 52). Students express high satisfaction levels when the assumed responsibility for learning and the learning environment are effectively shared by the instructor and the student.

A few select institutions of higher education have grown their endowment balances to remarkably high levels over the last 20 years. According to Kaufman and Woglom (2008), some of these institutions will be faced with new pressures from constituents regarding the appropriate use of these funds. Some believe that the fiduciary

responsibility of university trustees should require that a larger portion of these excessive endowments be redirected to help lower tuition. University trustees must consider intergenerational equity as they balance the needs of current and future students (Kauffman & Woglom). Alternatively, Webber and Rogers (2014) argued that endowment resources can play an important role in lowering tuition payments for current students with the end goal of controlling an institution's student load default rate.

Fundraising approaches and techniques vary drastically among various types of higher education institutions. Current economic realities must also be factored in. Curry et al. (2012) studied best practices for institutions of Christian higher education to raise philanthropic support during periods of economic stress. According to the researchers, institutions that experienced increased philanthropic support attributed "clearer communication and a stronger case for support" (p. 244) as the primary factors for the increase. The research team identified face-to-face relationship building as the primary practices for increasing such factors.

The way in which a university communicates with its alumni makes a difference in fundraising success. Das, Kerkhof, and Kuiper (2008) studied fundraising messages to determine the effectiveness of various approaches. The research team tested the impact of including or not including charity goal attainment language in a fundraising appeal, positive or negative message framing, and statistical or anecdotal evidence on persuasion. Das et al. concluded that statistical evidence was more effective when combined with a negative message frame and that anecdotal evidence was more effective when combined with a positive message frame. The authors further concluded that fundraising messages

that included information about the likelihood of charity goal attainment were more effective at convincing individuals to donate.

Proper, Caboni, Hartley, and Willmer (2009) examined factors that influence total dollars raised and fundraising efficiency at private non-profit colleges and universities. They concluded that older institutions raise more funds than younger institutions, but were less efficient in doing so. Staff size was the most significant predictor of fundraising success, while enrollment size had a positive effect on fundraising efficiency.

Olberding (2012) studied the long-term effects of the student philanthropy teaching strategy. The author focused the study on determining the extent student philanthropy programs achieve a lasting impact on the students' awareness of issues in the nonprofit sector and their engagement in addressing these issues. Olberding determined that students who participate in student philanthropy training during college are up to 30% more likely to donate to charity compared to the general population and are three times more likely to serve on a nonprofit board. Service learning has become an integral part of today's university experience. For institutions that seek to positively influence the nonprofit sector through their alumni, this teaching method could prove to be very advantageous and greatly affect institutional momentum as well as encourage students to support their alma mater as alumni (Olberding). Meer (2013), arriving at a similar conclusion, pointed out how important it is for universities to foster a habit of giving among young alumni. Such efforts have proven to provide the long-term benefits of increasing annual gift amounts as alumni age.

Alumni philanthropic giving is one of the oldest forms of institutional support and often represents one of the largest and most significant components of a comprehensive, well-developed fundraising program (Council for Aid to Education, 2014; Lee, 2008). The level of alumni giving can be reflective of the preserved value proposition held by an institution's alumni (McDearmon, 2010; Powell et al., 2012; Sung & Yang, 2009; Terry & Macy, 2007). Prospective students utilize alumni giving as a point of comparison in considering which university to attend. Consequently, success or failure regarding alumni giving can have current and long-term effects.

Alumni Giving

Terry and Macy (2007) found that student's on-campus experience, institutional reputation, and selectivity, all impact propensities to give as alumni. The researchers further determined that the higher the level of student debt the lower an institution's alumni giving rate would be. This trend has increased in recent years as state and federal support for higher education has decreased and students are consequently required to pay for a larger portion of the total costs (Elliott & Nam, 2013; Fry, 2012).

As the costs of higher education continue to rise, institutions must find a way to convince their alumni that its future success depends on the level of their financial support (Terry & Macy, 2007). According to Elliott and Nam (2013), this is particularly true in the short-term as the household financial health of a young college graduate can at times be weaker than similar individuals who chose not to attend college. According to the authors, college debt can have a substantial impact on a person's net worth in the early years directly following graduation.

According to Weerts and Ronca (2009), the most significant distinguishing characteristic between donors and non-donors was based on one's belief that the institution needs and is worthy of support, as well as their perceived outcome of a given gift. The researchers also determined that alumni families with household incomes of \$90,000 or higher were statistically proven to provide charitable support to their alma maters more consistently and at a higher dollar level. Alumni engagement was also a significant factor in predicting alumni giving.

Chung-Hoon et al. (2007) developed the Donor/Organization Integration Model (DOIM) to identify two constructs to classify interactions with donors that would produce enduring donor relationships. Chung-Hoon et al. concluded that the DOIM research helped institutions clarify their interactions with donors in order to focus on more complex donor relationships. Such efforts proved to have an effect on an institution's ability to engage donors in more meaningful ways. The authors acknowledged how influential such an approach could be on developing enduring donor relationships and fundraising outcomes.

Weerts, Cabrera, and Sanford (2010) concluded that there are two main dimensions of alumni non-monetary support behaviors, volunteerism and political advocacy. The most common elements of volunteerism demonstrated by alumni were (a) recruiting students, (b) mentoring alumni, and (c) participating in special events. The most common elements of political advocacy were contacting legislators, including local politicians and the governor. These findings help to broaden the view of successful alumni engagement strategies. Unique engagement strategies must be developed to address the needs of a universities faculty and staff. According to Borden, Shaker, and

Kienker (2014) there is much to be learned about working place giving. While alumni members who are employed by their alma mater are more likely to donate to the institution, specific strategies must be developed to reach this important constituency group effectively. (Borden et al.; Shaker, Kienker, & Borden, 2014).

According to Langseth and McVeety (2007), the strategy of engagement can be utilized far beyond alumni engagement strategies. Universities who integrate engagement as a fundamental strategy for all aspects of university operations can experience far-reaching benefits. A study of Portland State University's approach to engagement reveals that "a current university-wide planning process has, for the first time, explicitly established 'engagement' in learning, in scholarship, and in institutional partnerships (Langseth & McVeety, p. 117)." Along these same lines, Newman and Petrosko (2011) explored factors that were predictive of alumni association membership and determined that engagement played a key role. Their results suggested that the quality of one's experience with their alma mater as an alum has a direct result on their willingness to support the university. Wunnava and Lauze (2001) further confirmed that alumni who volunteer for the university are far more likely to donate.

Sung and Yang (2009) identified four variables that are key to influencing students' supportive intentions (a) the level of active communication behaviors of students, (b) perceived quality of educational experience with the educational institution, (c) perceived quality of relationships with the university, and (d) perceived reputation of the university. Similarly, McDearmon and Shirley (2009) determined a positive university experience, being an in-state student, and making gifts to other charities, were the strongest predictors for young alumni institutional giving. These results suggested

that alumni giving percentages increased the longer the student had been out of school. In the same vein, Sun, Hoffman, and Grady (2007) concluded that alumni giving increases when alumni have a favorable university experience both as a student and as an alum and felt informed about university needs.

Expanding on earlier research, McDearmon (2013) focused on the difference between how a university identifies with its alumni and the way alumni view their relationship with the university. Alumni with increased role identity were more likely to financially support the university and participate in events, volunteer, and join the alumni association. The researcher determined a clear distinction between identities that institutions place upon their former students and the identity alumni accept for themselves.

Common sense seems to dictate that the higher a person's income, the more likely they would be to donate to charity. Wu and Brown (2010) determined that families with higher incomes were associated with persistent giving to education. Individuals with educational experience beyond high school are also more likely to regularly give to education. However, Wu and Brown determined that families with children currently in high school did not demonstrate a significant affinity for giving to education.

Gottfried (2008) determined strong evidence that non-alumni financial support of universities has a direct impact on the charitable support provided by an institution's alumni base. The researchers concluded that charitable giving of parents, corporations, and foundations significantly influence alumni donation behavior. For private institutions, parents and foundations had the most statistically significant impact on alumni giving.

Tiger and Preston (2013) concluded that online course completion was negatively correlated to alumni donations at a statistically significant level. The researchers also determined that a student's age, campus organizational involvement, and living on campus were all positively correlated to alumni donations. The more a student is engaged in campus life, the more generous they will be in supporting the institution.

In studying the correlation between a university's communication vehicles and alumni annual giving, Levine (2008) concluded that the quantity of communications items sent to alumni was not positively correlated with alumni participation and giving levels. However, the researcher did determine that the frequency of alumni magazine mailings had a positive correlation with alumni giving levels and participation rates. The authors concluded that the frequency of direct mail appeals had a positive impact on annual fund appeals but a negative impact on campaign appeals. Bingham, Quigley, and Murray (2003) furthered this understanding of communication strategies by examining the effect of various donor acknowledgement programs. Their results suggest that a more personalized acknowledgement program can produce an increase in alumni giving.

Wunnava and Okunade (2013) analyzed the independent variables of gender, membership in a Greek organization, senior executive title, involvement in alumni activities, and the effect of winning a national championship in football or men's basketball. They concluded that alumni males gave nearly 9% more than their female counterparts and those alumni who were members of Greek organizations gave 5.6% more than non-members did. Senior executive alumni, made up of corporate CEOs and presidents, were proven to donate 6.3% more than alumni with subordinate titles. The researchers determined that alumni who participate in alumni activities donate 20.5%

more, on average, than alumni who do not participate. Years in which a national championship was won in football or men's basketball resulted in an 82% increase in alumni donations.

Williams (2007) studied the preferences of charitable donors by age groups. The authors divided study participants into three groups (a) young donors were defined as individuals between the ages of 18 and 39, (b) baby boomers were defined as individuals between the ages of 40 and 58, and (c) mature adults were defined as those individuals age 59 and higher. According to Williams, baby boomers valued information more than mature donors did and at a statistically significant level. However, no statistical significant difference was found between baby boomers and mature adults with respect to organizational efficiency and outcomes. The researcher further concluded that of the three age groups, mature donors had the highest consideration on organizational efficiency when considering a gift and young donors were the least concerned with efficiency. Young donors placed the highest consideration on the program outcomes of an organization when deciding to give. The authors further concluded that young donors use more sources of information when considering a gift than baby boomers.

Bequests and other planned giving support for universities can be an important component of a well-crafted advancement program (Routley, Sargeant, & Scaife, 2007). As an institution's alumni reaches retirement age, universities need to be in position to effectively present the case for planned giving support. With much of a families wealth tied up in non-cash assets, it is important for fundraising professionals to not overlook potential bequest prospects. Current giving patterns can often be misleading when attempting to discover those most willing to include the institutions in their estate plans

(Routley et al.). According to Routley et al., many donors are motivated to give a planned gift from both the altruistic and egoistic perspective. Recognizing both can open up new doors of bequest possibilities.

Effective communication strategies are key to keeping alumni informed and engaged (Moore & McLaughlin, 2007). According to Moore and McLaughlin, electronic based communications strategies play an important role in the overall alumni communications plan. E-mail and various social media channels represent a cost effective means for engaging alumni and generating philanthropic support. Moore and McLaughlin determined that the factors of age and gender need to be considered when developing an electronic communications strategy. According to their research, e-mail is an effective communications vehicle for older alumni, particularly older females. Electronic communications strategies must be reevaluated on a regular base to monitor effectiveness. Advancement professionals need to routinely analyze these strategies for maximum return on investment and to ensure a positive alumni engagement experience.

Wastyn (2009) and McDearmon (2010) furthered this understanding by conducting research that focused on reasons why alumni choose not to support their alma mater. Wastyn (2009) identified four major themes behind why alumni chose not to donate: they viewed college not as a charity but a commodity, from their perspective the college did not need money, they had uncertainties and misperceptions about giving, and they did not make giving decisions logically. Wastyn argued that study participants viewed their college experience as a service for which they paid an agreed-upon price and not a lifelong association. Their results suggested a number of implications for the fund-

raising practice, including the need to communicate more effectively the needs of the university, the giving process, and the societal benefits of higher education.

Along these same lines McDearmon (2010) concluded that there are three primary reasons why young alumni choose not to support their alma maters: (a) they do not feel that the university provided adequate career services, (b) they want to receive incentives for charitable gifts to the university, and (c) they want greater control of where their donations are utilized. Young alumni approach their philanthropic giving in very different ways compared to older alumni. A student's university experience can influence enduring philanthropic support of their alma mater. Meer and Rosen (2009) studied student athletes and the correlation between a team's winning record and their likelihood of supporting the institution philanthropically. Their results suggested that when a student athletes' team won the conference championship during their senior year, they gave 8% more than their non-team members. From the broader perspective, Holmes (2009) suggested that the success of current athletic programs can generate greater philanthropic support.

Institutional Factors

The industry of higher education is diverse and complex. Determining an institution's rank among competitors is important for university administrators and prospective students alike. Carrigan (2012) described this benchmarking process as "a strategic and structured approach whereby an organization compares aspects of its processes and/or outcomes to those of another organization or set of organizations to identify opportunities for improvement" (p. 61). The industry is full of numerous national research and data sources. According to Carrigan, many of these data sources extend

back 40 years and provide rich data to determine peer institutions for comparison purposes. University administrators and key faculty members are encouraged to develop and follow a detailed and extensive process for determining institutional peers and key institutional factors to be measured. A number of key areas should be considered when identifying institutional factors to be compared, they include; institutional characteristics, student characteristics, student finances, faculty and expenses, revenue sources, and degrees awarded (Carrigan).

Financial health is another important variable for comparing institutions of higher education. The Department of Education's (DOE) *financial responsibility score* is one such measure for evaluating the financial health of colleges and universities in America. According to Blumenstyk and Newman (2014), 118 nonprofit colleges and universities failed to pass the DOE's financial responsibility test in 2012. Blumenstyk and Newman described the test as "a calculation that takes into account such factors as colleges' debts, assets, and operating surpluses or deficits, are devised for all private colleges that participate in federal student-aid programs" (para. 3). Scores can range from negative 1 to positive 3. Institutions that score less than 1, fail the test, and must post a letter of credit to maintain eligibility for the federal student-aid program. Institutions that score 1.0 to 1.4 are considered by the Department of Education to be on probation and are required to follow special procedures and undergo additional monitoring. A score of 1.5 or higher is considered passing (Blumenstyk & Newman). Institutions that perform poorly on the DOE's financial responsibility score can face substantial challenges in improving their score. Many private colleges have expressed disappointment with the Department of Education's method of calculating the score. Blumenstyk (2011) argued that there is a

strong belief among university business officers that the current system is outdated and in much need of modification. According to Blumenstyk, many believe that the 17-year-old formula is not only flawed, but inconsistently administered.

The CCCU also has a tool, the composite financial index, for analyzing institutional financial health. According to Wallace (2011), “small private colleges and universities will need great tools and great diligence to survive chronic financial distress and the challenges of a competitive marketplace” (p. 6). He recommended four such tools, a) the composite financial index, b) the balanced scorecard, c) financial analysis and strategic review concepts, and d) financial equilibrium concepts. Wallace (2011) suggested that these tools should be used to drive two core elements of higher education success, fiscal discipline and enrollment growth. If either one of these two factors are mismanaged, institutions substantially increase the risk of operational failure.

Vermeulen and Schmidt (2008) analyzed factors related to student educational experiences and career success after graduation. They concluded that universities can increase student motivation and learning outcomes by ensuring good faculty-student and student-student interactions, and by developing strong curriculum composition and organization. Additionally, the researchers determined that career success is strongly related to a student’s learning outcomes and that extra-curricular activity while in college increase chances for initial and long-term career success. Gaier (2005) and Monks (2003) both confirmed these finding and determined that an alumnus giving was significantly influenced by one’s satisfaction with academic coursework. Their results also confirmed the positive relationships and interactions between faculty and student was predictive of one’s participation in alumni activities.

Conventional wisdom suggests that universities should be evaluated based on their return on investment (ROI). de Alva and Schneider (2011) studied the return on investment generated by American colleges and universities for students and taxpayers. According to their research, college graduates of less selective institutions experience \$230,000 more income, on average, over their lifetime than that of their peers who did not attend college. This number grows to \$500,000 for students graduating from institutions that are more competitive. de Alva and Schneider (2011) concluded that private, non-profit and for-profit institutions provide the greatest rate of return for taxpayers, compared to their peer public institutions.

Powell, et al. (2012) examined relationships between institutional characteristics and expenditures and the interaction of these variables on an institution's efficiency and effectiveness. The researchers identified a point of institutional equilibrium where the demand curve and the cost curve intersect. Institutions who overextended themselves on the expenditure side did not achieve satisfactory efficiency scores on the benchmarking model. The authors identified a number of outputs for institutions of higher education including; degrees awarded, job placement, credit hours produced, and the amount of time to degree completion. These outputs were utilized to measure effectiveness. Institutions with underdeveloped outputs did not achieve satisfactory benchmarking levels for effectiveness.

Powell et al. (2012) clearly demonstrated varying levels of institutional expenditures for universities who have produced high output levels. Consequently, the evidence suggested that the value proposition of higher education can be measured and improved. According to the authors, adopting such a benchmarking model may allow

parents and students to compare and evaluate institutions during their search to find the right college or university.

Private Christian colleges in America are just as dependent on federal aid today as public institutions are (Andringa, 2009). Federal student aid can be a positive and negative thing for Christian institutions. Student loans are necessary to bridge the affordability gap, but Andringa points out the challenges of accepting such aid for universities who want to maintain their religious ties. Andringa cited three emerging trends for Christian higher education:

- a) There remains a steady, dependable student market for distinctly Christian institutions.
- b) Increasing competition is everywhere: public institutions, for-profit institutions, e-learning, international institutions, and private institutions with better locations, programs, and endowments.
- c) Government student aid appropriations will not keep up with inflation in the long term because of competing priorities. (p. 171)

According to Andringa, nearly 89% of private distinctly Christian institutions in America fight for survival year after year.

Christian colleges and universities serve two masters, one being the academy of higher education and one being the world of the church. Henck (2011) stated, “ Christian colleges and universities operate in a unique set of circumstances within American higher education. They are deeply embedded in and accountable to two worlds, each of which has a distinctive culture” (p. 196). The struggle of university administrators is to excel in both worlds. On the academic side, institutions face strict standards from institutional

accrediting bodies for high student learning and operational performance. Church leaders have their own set of performance expectations related to a university's ability to successfully live out their Christian mission and vision (Henck, 2011).

Raikes et al. (2012) performed a research study to evaluate institutional characteristics that predicted the greatest likelihood of completing college in four years. The researchers studied data from 80 U.S. institutions that were all members of the CCCU. The average four-year graduation rate was the dependent variable used, along with 17 independent variables. The independent variables were categorized in three areas (a) institutional factors, (b) financial factors, and (c) religiosity factors.

Institutions with higher net cost of attending consistently achieve higher four-year graduation rates (Raikes et al., 2012). The researchers also discovered that institutions that invest more on instructional expenditures per full-time equivalent student have higher average four-year graduation rates. It was also concluded by the authors that the lower an institution's student to faculty ratio and the higher the incoming student body grade point average, the higher the four-year graduation rate. According to Raikes et al., religious factors had very little effect on four-year graduation rates.

How selective universities are in admitting students can be measured by the average ACT and/or SAT scores of their incoming freshman class. The higher the score, the more attractive an institution is to academically talented high school students (Wilson & Adelson, 2012). The researchers found that high achieving students often choose a college based on one of three things; (a) the prestige of the school, (b) the availability of special programs, and (c) the availability of scholarship support. For private Christian universities, these same factors often hold true. Wilson and Adelson's findings

determined that only 1.4% of study participants listed religious affiliation as the main reason for choosing a school.

High academic performing high school students are now more willing to consider universities further from home (Hoxby, 2009). As transportation costs have become more affordable over the last few decades, students are willing to travel further to go to school. Hoxby stated,

The reason that initially selective colleges are much more selective today is that, in the past, students' choices were very sensitive to the distance of a college from their home, but today, students, especially high-aptitude students, are far more sensitive to a college's resources and student body. (p. 116)

Advanced placement programs have proven to assist students with the transition from high school to college academics. Students with advanced placement earned higher first semester grade point averages, and are more likely to continue in college (Scott, Tolson, & Lee, 2010).

Vander Schee (2008) performed a study to analyze the effectiveness of retention strategies at church related colleges finding that the long-term utilization of an overall retention strategy and student selectivity were positively correlated with student retention to graduation. Alarcon and Edwards (2013) conducted a study to identify possible individual differences in ability and motivation factors on the retention rate of first-year college students. The ability predictor of retention was assessed using the students American College Test (ACT) scores. The motivation predictors of retention were parent's education, gender, conscientiousness, and trait affectivity.

Alarcon and Edwards (2013) found support to prove their dual-process theory of ability and motivation on university retention. Cognitive ability was a statistically significant predictor of university retention. The researchers also concluded that conscientiousness proved to be statistically significant in predicting increased retention rates. The National Survey of Student Engagement is used by higher education institutions to benchmark progress against national trends. As more nontraditional students enter college, there is growing concern of the survey's ability to adequately measure the engagement of such students (Price & Baker, 2012).

Expanding on the issue of retention, Gladieux and Perna (2005) and Webber and Roger (2014) identified institutional factors contributing to increased student drop out and loan default rates. They sighted that an appropriate allocation of institutional resources for academic and student support services can have a substantial impact on both retention and degree completion. Gladieux and Perna determined that the majority of students who drop out experienced academic challenges during their first year resulting in a grade point average of less than 2.25. According to Gladieux and Perna, "among the known risk factors for dropping out are delayed entry into postsecondary education after high school, attending college part-time, and working full-time while enrolled" (p. 5). Increasing student loan default rates are a major concern for policy makers and university administrators (Cunningham & Kienzl, 2011; Gladieux & Perna; Webber & Roger, 2014). Additionally, some believe that the student loan crisis is much worse even than the current cohort default rates suggest, encouraging policy makers to include those borrowers who have become delinquent but have not reached the point of

being in default (Cunningham & Kienzl, 2011). Cunningham and Kienzl suggested that as high as one fourth of the individuals entering repayment fall into this category.

Ionescu (2009) determined that the composition of a prospective student's financial aid package could have a significant impact on the likelihood of enrollment and the potential of future loan default. The researcher concluded that policy changes that would allow students to lock in interest rates or make future changes to repayment plans could prove to reduce student loan default. Marr, Mullin, and Siegfried (2005) furthered this understanding by evaluating various types of student financial aid packages and their impact on future alumni giving. Their results suggested that loans decrease the likelihood of future support, while grants have an opposite effect. The researchers acknowledge that a gain or loss in future contributions should be factored into financial aid award decisions made today.

Cheslock and Hughes (2011) studied state higher education finance policy differences across the United States. Data was used from two national data sets, the Integrated Postsecondary Education Data System (1988-2009) and the National Association of State Student Grant and Aid Programs (1988-2008). The researchers established two sample groups for each of the data sets (a) a sample of 519 four-year public research institutions and (b) a sample of 999 two-year public associate's colleges. The authors revealed the fact that while the federal government has a major role in supporting public higher education, state government policies have a much larger impact on institutional subsidies. For example, while the federal government provides the structure for student loans, states provide various levels of student grants. Some of these grants are needs-based, while others are not.

Cheslock and Hughes (2011) concluded that tuition and fees grew substantially across the board for the study period. Tuition and fees for four-year institutions grew by 119% and by 54% for two-year institutions. As tuition and fees rose, state funding for higher education steadily declined in terms of dollar amount and percentage. As a result, institutions have needed to raise support from outside sources to remain competitive. The implication of these data on the topic of the relational effect university momentum has on the generation of philanthropic giving shows that the gap between public and private higher education is narrowing.

Fee, Prolman, and Thomas (2009) identified characteristics that assist transfer students in having a successful college experience, they were: time management and organization, connecting academics to students' lives, the need for challenging work, the helpfulness of small class sizes and closer relationships with faculty members. The authors stated that study results regarding students' feelings toward employment patterns varied from earlier research studies. Some students felt having a job enriched the college experience while others felt overwhelmed by the additional burdens that employment can bring. More and more universities are increasing the number of transfer students on their campuses. Transfer student success is key to university momentum.

Transfer student transfers are not the only transitions that have the potential of impacting institutional momentum; Presidential transitions also have the potential to have a positive or negative impact. The timing and success of transitions can have a lasting impact. Smerek (2013) performed a study to investigate sense making strategies presidents use when coming to a new institution and concluded that new presidents work first to understand the culture and the current realities of the institution. Presidents

attempt to get totally immersed in institutional life to better understand the purpose of the organization. The researcher also revealed that new presidents rely on their administrative teams and their own professional abilities to determine the strategic priorities for the short and long-term. Study participants expressed to the author the need to reduce uncertainty by speaking with peers and mentors.

Presidential transitions during a capital campaign can have extremely negative consequences. Nehls (2012) analyzed the effect of university presidential transitions during capital campaigns and the impact on institutional culture. The author analyzed three different transitional situations: changes in leadership under good conditions, changes in leadership under bad conditions, and multiple changes in leadership during a campaign. Under all conditions the researcher determined that presidential transitions have a negative impact on capital campaigns, either by causing delays, confusing donors, producing negative publicity, or contributing to poor campus moral. Therefore, it is evident that presidential transitions negatively affect capital campaigns. Such transitions also affect an institution's momentum.

Perrakis, Galloway, Hayes, and Robinson-Galdo (2011) performed an empirical study of presidential satisfaction in higher education. The researchers surveyed 96 presidents of two-year and four-year colleges in California, Florida, Hawaii, and New York. The survey questions covered the areas of demographics, institutional attributes, career trajectory, self-assessment of success, external assessment of success, motivational factors, campus climate, discord between what is and what should be at the institution, and personal commitment to the presidency.

Perrakis et al. (2011) concluded that institutional discord played a significant role in predicting self-reported presidential satisfaction and performance. Demographic factors were found to have similar effects while at a lesser degree. The researchers determined that presidents who reported to boards, lead four-year versus two-year colleges, had terminal degrees in fields outside the humanities, were unmarried, and had been in office longer were more likely to be satisfied with their situations.

Job satisfaction among university faculty and staff is also key to an institution's health. Bisbee (2007) determined that the quality of a university's leadership development program could be an important component in creating satisfied employees. According to the researcher, institutions need to allocate more resources to identify faculty and staff members who have leadership potential and begin training them early in their careers. Bisbee stated:

The data showed that many of the current leaders came from within the ranks of the faculty, even within their own institutions. This should encourage institutions to make a serious investment in professional development and career training as the individuals will likely be leaders in their own institution. (p. 85)

All colleges and universities across America desire positive institutional momentum. At times organizational change is necessary to get an institution moving in the right direction. University presidents are key players in formulating and executing a change management strategy. Jansen (2004) found that there is a direct correlation between positive institutional momentum and goal attainment. Jansen stressed the importance of regular communication sessions informing organizational constituents of the cumulative progress being made. Jansen stated, "the manifestation of momentum

following specific change-related events and fluctuations in individual perceptions of momentum over time because organizational momentum is generated and maintained by shared perceptions and interactions” (p. 290).

Collins (2005) provided a helpful word picture and tool called the flywheel model to guide the overall process of focusing the creative efforts of change management and strategy development. As an organization becomes more adapt at goal attainment and achieving positive results, momentum builds.

Those results, in turn, attract resources and commitment, which you use to build a strong organization. The strong organization then delivers even better results, which attracts greater resources and commitment, which builds a stronger organization, which enables even better results. (p. 24)

Aligning Collin’s flywheel model, allows universities to gain momentum and build strength, which demonstrates better results, which builds the brand, which attracts even more students. When effectively executed, change management strategies can quickly build momentum and help sustain long-term viability and success.

With the growing need for universities to raise philanthropic support to survive and thrive, momentum becomes an important factor in an institution’s success. University presidents and administrators must thoroughly study and analyze which institutional factors contribute to fundraising success and which do not. Understanding the correlation between seemingly unrelated university activities and their impact on fundraising is key and must be aligned with an institution’s strategic planning efforts.

CHAPTER III

METHODOLOGY

Introduction

As the competitive landscape of higher education becomes more and more intense, private Christian institutions face unprecedented challenges to reach a position of financial strength and sustainability (Curry et al., 2012). An institution's ability to raise private philanthropic support often determines success or failure (Hall, 1992). Numerous studies have provided evidence of the direct correlation between various institutional characteristics and a university's ability to raise philanthropic support. While these studies have helped to reveal important findings for the industry, more research is needed (Gunsalus, 2005; Lee, 2008).

The purpose of this research was to examine the relationship between university momentum and philanthropic giving in order to assist university boards, administrators, and faculty in identifying those institutional characteristics that predict fundraising success. The researcher sought to further study the effects of institutional age and size on these data. With the above purpose in mind, the researcher identified the following research questions:

1. Which institutional characteristics, if any, are predictive of philanthropic support?
2. What effect, if any, does enrollment size have on the prediction of philanthropic support?

3. What effect, if any, does institutional age have on the prediction of philanthropic support?

Research Design

This section describes the research design, methods, and procedures used to answer the research questions, as well as the theoretical foundation for the methodology employed. Using quantitative analysis and a correlational research design, this study sought to determine if relationships exist between the dependent and independent variables. If such relationships proved to exist, the study also sought to determine the strength and predictive power of these relationships (Gay, Mills, & Airasian, 2012).

The research design included descriptive statistics, a Pearson r correlation test, and the use of multiple regression analysis. The purpose of the research design was to determine what, if any, relationships exist between variables and their predictive power on the dependent variable of alumni giving rate. The coefficient of determination was further utilized to measure the percentage of the variance in the alumni giving rate represented by the regression model.

The dependent variable of alumni giving rate was selected based on the researcher's interests, while the selection of independent variables was driven by the literature review. This study focused on a select group of private evangelical colleges and universities in America. Inclusion in the study sample was determined by an institution's membership in the CCCU and the availability of data for that institution.

The six-year study period was driven primarily by the availability of data for the institutions included in the study sample. Changes in industry standards for certain variables of interest prevented the researcher from easily expanding the study period. For

example, the standard for evaluating student loan cohort default rate recently changed from a 2-year cohort model to a 3-year cohort model. Such changes in standards present unique challenges for study design.

Population

The population for this study was comprised of the 121 North American member institutions of the CCCU. Of particular interest to the researcher are institutions that have a full-time traditional undergraduate enrollment of less than 5,000 students. The study sample was made up of 88 U. S. member institutions of the CCCU as of June 30, 2012, whom data were available for during the study period. The sample institutions have many similar characteristics. However, they are also diverse in many ways. The oldest institution was 186 years old at the mid-point of the study and the youngest was 20 years old. The largest institution had an average full-time traditional undergraduate enrollment during the study period of 4,191 and the smallest was 434. The sample was also geographically diverse, representing 29 states.

Data Collection

The majority of data for the study were collected from three institutional-level sources, The Integrated Postsecondary Education Data System, Federal Student Aid, and the U. S. News and World Report College Ranking Survey. However, data for two independent variables were collected from each institution's website. The largest source of data for the study was The Integrated Postsecondary Education Data System (IPEDS). IPEDS was launched by the United States Department of Education's National Center for Education Statistics in 1986. All higher education institutions that qualify for federal student financial aid are required to participate in the IPEDS annual survey.

Consequently, IPEDS maintains a vast database of institutional-level, higher education characteristics (Integrated Postsecondary Education Data System; Data, 2014).

Another source of data for the study was the office of Federal Student Aid. The United States Department of Education's Federal Student Aid office manages all federal financial aid available for Americans pursuing a higher education degree. The office was established as a result of Title IV of the 1965 Higher Education Act (Federal Student Aid; Who Are We, n.d., para. 2)

Finally, data were collected from U.S. News and World Report. The annual U.S. News and World Report College Ranking Survey collects data on various measures of academic quality among institutions of higher education in America. Many, as a credible source for annually ranking colleges and universities, acknowledge the survey (U. S. News and World Report; College Compass, 2014).

Data for all variables, except presidential tenure, were collected for 6 academic years, beginning July 1, 2006 and ending June 30, 2012. Data for presidential tenure were collected from July 1, 1987 to June 30, 2012. Each institution's data were then averaged for each variable. The resulting scores were utilized for descriptive statistics and statistical analysis. At the direction of the researcher, the Hanover Research Company assisted with the data collection. Table 1 lists the independent and dependent variables along with the description and source for each.

Table 1
Variable descriptions and sources

Variable	Description	Source
Alumni Giving Rate ^a	Undergraduate alumni giving rate	U. S. News and World Report
Endowment Balance	Annual endowment balance for the end of the fiscal year	IPEDS
Enrollment	Traditional undergraduate FTE enrollment for fall semester	IPEDS
Financial Responsibility Composite Score	Measure of relative financial health	U. S. Department of Education
Graduation Rate	Undergraduate 6-year graduation rate	IPEDS
Institutional Age	Institutional age at the midpoint of the study	Institutional websites
Presidential Tenure	The number of university presidents in the last 25 years	Institutional websites
Retention Rate	First to second year full-time retention	IPEDS
Student Loan Default Rate	Two-year cohort loan default rate	U. S. Department of Education
Student Debt	Average amount of Federal student loan aid received by undergraduate students	IPEDS
Student Selectivity	ACT composite 75 th percentile score	IPEDS

Note. ACT = American College Testing. IPEDS = Integrated Postsecondary Education Data System

^aDependent variable

Analytical Methods

The researcher utilized a combination of descriptive and inferential statistics to analyze each of the research questions. The first phase involved summarizing and organizing the data for all independent and dependent variables. Excel was initially used to accomplish this task. Once the data was in Excel, the values for each variable collected over the study period were averaged, resulting in one mean value per institution for each variable. These values were then entered into SPSS for Mac for further analysis. Descriptive statistics were then conducted on these averaged values for all independent and dependent variables. Table 3 in Chapter IV lists these results, including the minimum, maximum, mean, and standard deviation for each variable.

For the first research question, the independent and dependent variables were analyzed using a correlation coefficient test. In order to identify the presence and strength of any relationship between variables, the Pearson r correlation coefficient test was conducted. According to Salkind (2014), the size or strength of a correlation is represented in a score ranging from 1 to -1. Table 2 describes the various levels of size and strength for correlation results.

Table 2

Understanding the Size and Strength of Correlation Coefficient Results

Size	Strength of the Relationship
.8 to 1.0	Very strong
.6 to .8	Strong
.4 to .6	Moderate
.2 to .4	Weak
.0 to .2	Weak to none

Note: Size can be represented as a positive or negative value without changing the strength of the relationship. Adapted from “Statistics for People who (think They) Hate Statistics: Fifth Edition,” by N. J. Salkind, 2014, p. 92.

The researcher utilized the results of the Pearson r correlation test to identify those independent variables that were highly correlated with the dependent variable of alumni giving rate. The significance level was set at $p < .05$. In an effort to better understand the strength and predictability of these relationships, the researcher utilized a multiple linear regression analysis. Those variables correlated with alumni giving rate at a statistically significant level were all included in a single multiple linear regression analysis.

The researcher conducted a second multiple linear regression to help address multicollinearity issues apparent between the variables. The second regression included all variables that reached statistical significance of $p < .05$ or higher in the first regression. For the second research question, a regression analysis was conducted between the independent variable of institutional age and the dependent variable of alumni giving rate. Similarly for research question three, a regression analysis was conducted between fall enrollment and alumni giving rate.

Limitations

As with any study, certain limitations exist; limitations of time, resources, and scope. By focusing the study on member institutions of the CCCU that are located in the United States, the generalizability of these results to all institutions of higher education may be somewhat limiting. While the research suggests strong evidence for the institutional characteristics included in the study, there are undoubtedly others that could have also proven to be related to alumni giving.

The data for the study was collected from four separate sources and contained some missing data. Additionally, the data was self-reported by each institution and were not independently verified. The study period was six years. During that period, a national recession occurred which may have impacted the results of the study. It would have been interesting to see the results of a more longitudinal study. Constraints on the researcher and ready access to needed data prevented such a study to occur. Future researchers may want to extend the study period back 15 to 20 years in order to include times of economic expansion and contraction. Such an approach could prove to provide helpful evidence of various fundraising strategies necessary to succeed during good economic times and bad.

The study sought to identify institutional characteristics that were predictive of alumni giving. Based on the correlative nature of the study, the directional predictability between the independent and dependent variables was not researched. Furthermore, the study did not seek to prove causation. Robson (2011) acknowledged the challenges of proving causation in a non-experimental design. Future research is needed to shed light on the causal impact of these and other variables on alumni giving. Time and resource constraints did not allow for such elements to be included in the study.

Summary

The purpose of this research was to examine the relationship between university momentum and philanthropic giving in order to assist university boards, administrators, and faculty in identifying those institutional characteristics that predict fundraising success. The researcher sought to further study the effects of institutional age and size on these data.

The aim of the researcher, using quantitative analysis and a correlational research design, was to determine if relationships exist between the institutional characteristic of interest and alumni giving. Multiple regression analysis was also utilized to identify the predictive power of the regression model. Chapter IV provides an overview of the study findings and conclusions.

CHAPTER IV

FINDINGS AND CONCLUSIONS

Introduction

The researcher sought to examine the relationship between university momentum and philanthropic giving. The following research questions were asked:

1. Which institutional characteristics, if any, are predictive of philanthropic support?
2. What effect, if any, does enrollment size have on the prediction of philanthropic support?
3. What effect, if any, does institutional age have on the prediction of philanthropic support?

Using quantitative analysis and a correlational research design, this study sought to determine if relationships exist between the dependent and independent variables. If such relationships proved to exist, the study also sought to determine the strength and predictive power of these relationships (Gay et al., 2012). The research design included descriptive statistics, a Pearson r correlation test, and the use of multiple regression analysis. The purpose of the research design was to determine what, if any, relationships exist between variables and their predictive power on the dependent variable of alumni giving rate. The coefficient of determination was further utilized to measure the percentage of the variance in the alumni giving rate represented by the regression models.

Findings

The researcher utilized a combination of descriptive and inferential statistics to analyze each of the research questions. The first phase involved summarizing and organizing the data for all independent and dependent variables. Descriptive statistics were then conducted on these averaged values for all independent and dependent variables. Table 3 contains the descriptive statistics for the 90 institutions selected for the study sample, including the minimum, maximum, mean, and standard deviation for each variable. See the appendices for additional descriptive statistics and for a complete list of institutions included in the study.

Table 3

Descriptive Statistics

	<i>N</i>	Minimum	Maximum	Mean	Std. Deviation
Alumni Giving Rate ^a	90	1.95	34.13	13.39	7.31
Endowment Balance ^b	90	1.66	313.38	39.58	58.40
Enrollment	90	434.17	14,595.00	2,183.82	1,665.86
Financial Responsibility Composite Score	90	0.82	3.00	2.43	0.51
Graduation Rate	90	31.00	87.50	55.19	11.66
Institutional Age	90	20.00	186.00	98.34	37.38
Presidential Tenure	65	1.33	5.00	2.97	0.84
Retention Rate	90	56.50	95.17	73.87	7.98
Student Loan Default Rate	89	0.52	10.98	4.07	2.26
Student Debt	89	5,177.75	10,555.25	7,586.30	1,151.03
Student Selectivity	87	21.00	31.50	26.03	1.89

^a Alumni Giving Rate: Dependent variable

^b Endowment Balance: Dollar amounts are in millions.

During the study period the average alumni giving rate among institutions included in the study fell from 15.73 in 2007 to 11.27 in 2012. This represented a decline of over 28% in the alumni giving rate during the study period. Table 4 contains the minimum, maximum, mean, and standard deviation for each year of the study.

Table 4

Descriptive Statistics for the Average Annual Alumni Giving Rate

Year	<i>N</i>	Minimum	Maximum	Mean	Std. Deviation
2007	90	1.00	43.70	15.73	9.46
2008	90	1.00	48.60	14.73	8.94
2009	90	1.30	34.50	13.84	7.75
2010	90	1.40	32.90	12.86	7.34
2011	90	1.20	30.40	11.89	6.86
2012	90	1.60	27.70	11.27	6.38

Research Question 1

For the first research question, the independent and dependent variables were analyzed using a correlation coefficient test. In order to identify the presence and strength of any relationship between variables, the Pearson *r* correlation coefficient test was conducted. The correlation test identified seven variables that were highly correlated with the alumni giving rate, one variable at $p < .05$, and six variables at $p < .01$. Table 5 contains the results of the Pearson *r* correlation coefficient test.

Table 5

Independent Variable Correlation Test with Alumni Giving Rate

Variable	B	Sig.
Endowment Balance	.252*	.017
Enrollment	-.107	.317
Financial Responsibility Composite Score	.190	.073
Graduation Rate	.642**	.000
Institutional Age	.288**	.006
Presidential Tenure	.049	.699
Retention Rate	.560**	.000
Student Loan Default Rate	-.448**	.000
Student Debt	-.309**	.003
Student Selectivity	.569**	.000

* $p < .05$., ** $p < .01$.

The researcher utilized the results of the Pearson r correlation test to identify those independent variables that were highly correlated with the dependent variable of alumni giving rate. In an effort to better understand the strength and predictability of these relationships, the researcher utilized a multiple linear regression analysis. Those variables correlated with alumni giving rate at a statistically significant level were all included in a single multiple linear regression analysis. Two variables, graduation rate and student debt indicated significance at the $p < .01$ level. The summary regression model had an R^2 value of .464. Table 6 contains the results of the regression model.

Table 6

Summary Regression Model for Alumni Giving Rate

Variable	<i>b</i>	Sig.
Endowment Balance	.000	.981
Graduation Rate	.334**	.006
Institutional Age	.008	.666
Retention Rate	-.093	.586
Student Loan Default Rate	-.051	.900
Student Debt	-.001**	.044
Student Selectivity	.739	.197

Note. $R^2 = .464$, $N = 87$

** $p < .01$.

The researcher conducted a second multiple linear regression to help address multicollinearity issues apparent between the variables (Farrar & Glauber, 1967). The second regression included all variables that reached statistical significance of $p < .05$ or higher in the first regression. In the second regression, the variables of graduation rate and student debt both proved to be significant at the $p < .01$ level and had a R^2 value of .462. Eliminating all but these two variables from the original regression only reduced the R^2 value by .002. Table 7 contains the results of the targeted regression model.

Table 7

Targeted Regression Model for Alumni Giving Rate

Variable	<i>b</i>	Sig.
Graduation Rate	.381**	.000
Student Debt	-.001**	.006

Note. $R^2 = .462$, $N = 89$

** $p < .01$.

Graduation rate proved to be the strongest predictor of the alumni giving rate at the $p < .01$ level and an R^2 value of .412. Eliminating student debt from the regression model only reduced the R^2 value by .05. The regression equation was Alumni Giving Rate = .403(Graduation Rate) + -8.838. Consequently, it is estimated that for every .403 increase in institutional graduation rate, the alumni giving rate would go up by 1.0. Table 8 contains the results of the graduation rate regression model and Figure 1 shows the scatterplot.

Table 8

Graduation Rate Regression Model for Alumni Giving Rate

Variable	<i>b</i>	Sig.
Graduation Rate	.403**	.000

Note. $R^2 = .412$, $N = 90$

** $p < .01$.

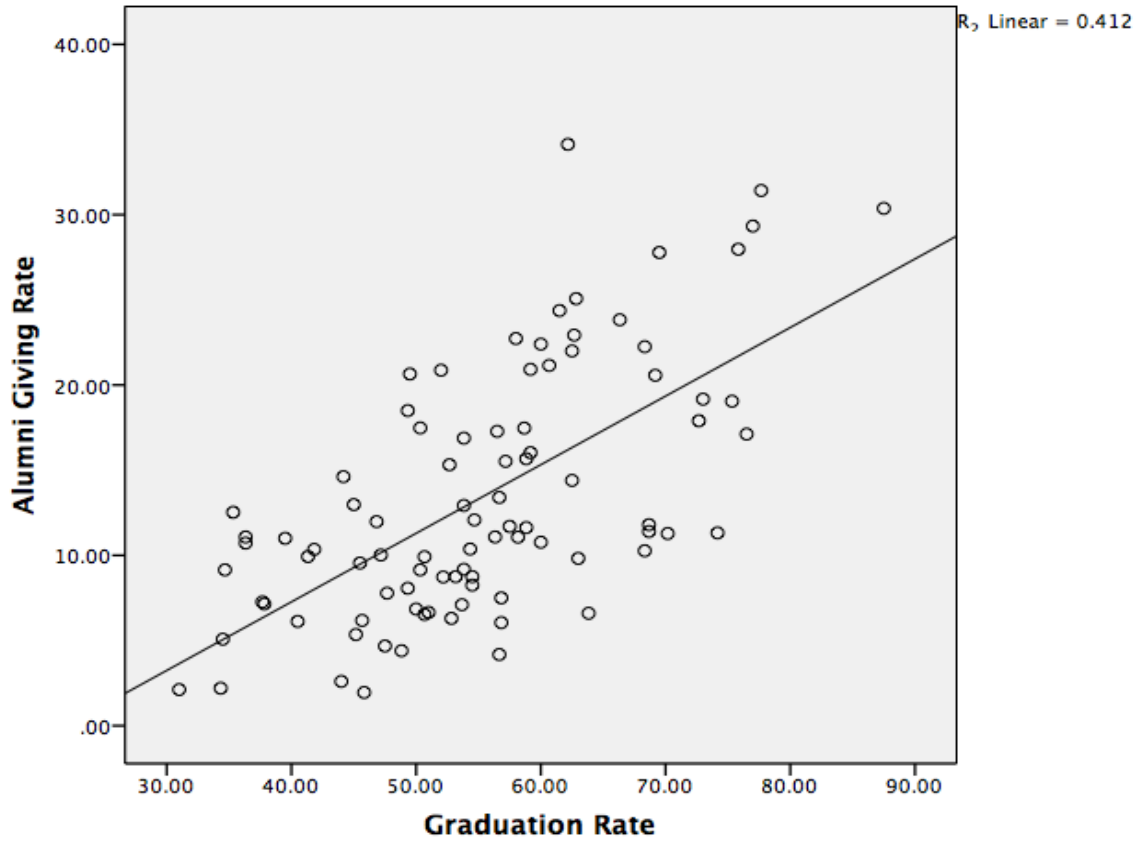


Figure 1. Graduation Rate Scatterplot

Student debt proved to be the next strongest predictor of the alumni giving rate at the $p < .01$ level and an R^2 value of .095. The regression equation was Alumni Giving Rate = $-.0029(\text{Student Debt}) + 28.152$. Consequently, it is estimated that for every .0029 decrease in student debt, the alumni giving rate would go up by 1.0. Table 9 contains the results of the student debt regression model and Figure 2 shows the scatterplot.

Table 9

Student Debt Regression Model for Alumni Giving Rate

Variable	<i>b</i>	Sig.
Student Debt	-.002**	.003

Note. $R^2 = .095$, $N = 89$

** $p < .01$.

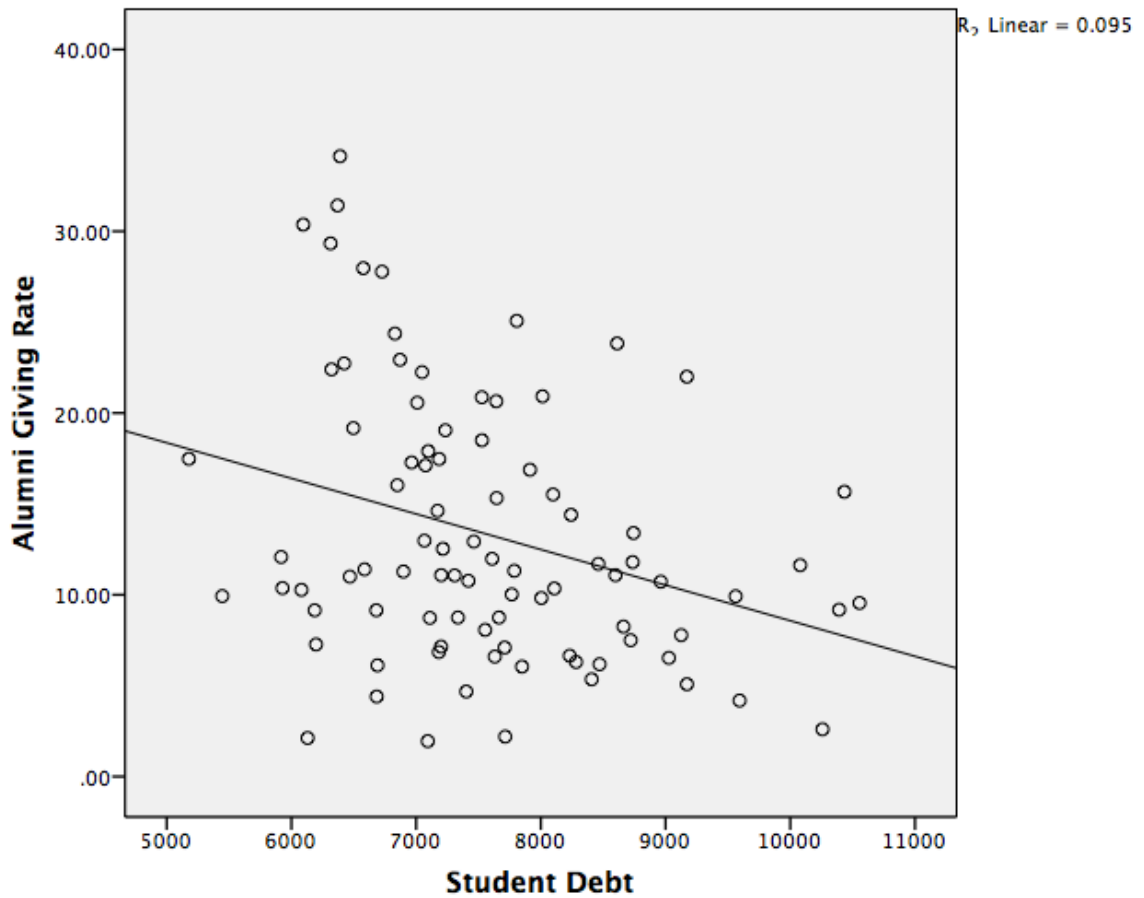


Figure 2. Student Debt Scatterplot

Research Question 2

For the second research question, the independent variable of enrollment was added to the targeted regression model, which included graduation rate and student debt. While enrollment was not significant when included in the initial regression model, it does prove to be significant here. The inclusion of enrollment raised the R^2 value to .519 and reduced student debt to marginal significance. Consequently, it is estimated that for every .001 decrease in enrollment, the alumni giving rate would go up by 1.0. Table 10 contains the results of the enrollment regression model.

Table 10

Enrollment Regression Model for Alumni Giving Rate

Variable	<i>b</i>	Sig.
Graduation Rate	.434**	.000
Student Debt	-.001	.063
Enrollment	-.001**	.002

Note. $R^2 = .519$, $N = 89$
** $p < .01$.

The researcher sought to further analyze how enrollment size impacted the alumni giving rate over the six-year study period by separating the institutions into three size categories. Table 11 contains the descriptive statistics of the analysis.

Table 11

*Descriptive Statistics: Average Alumni Giving Rate Trends
Based on Enrollment Size Category*

Year	Enrollment Size		
	0 – 1,499	1,500 – 2,499	2,500 and up
2007	17.82	14.69	13.95
2008	17.30	13.50	12.70
2009	15.69	13.34	12.22
2010	14.86	12.05	11.49
2011	14.63	10.05	11.10
2012	12.77	10.31	10.69

Research Question 3

For the third research question, the independent variable of institutional age was added to the targeted regression model, which included graduation rate and student debt. Consistent with the first regression model, institutional age did not add to the predictive power of the model. Institutional age was not significant and the R^2 value remained at .464. Table 12 contains the results of the institutional age regression model.

Table 12

Institutional Age Regression Model for Alumni Giving Rate

Variable	<i>b</i>	Sig.
Graduation Rate	.371**	.000
Student Debt	-.001**	.007
Institutional Age	.009	.571

Note. $R^2 = .464$, $N = 89$

** $p < .01$.

Conclusions

This study sought to explore the predictive power of various institutional characteristics on the alumni giving rate. Additionally, institutional age and size were studied to determine their predictive power on the alumni giving rate. University boards and administrators are faced with increasing challenges and obstacles along the higher education landscape. These unprecedented challenges have, and will continue to place growing pressure on institutions to raise philanthropic support from outside sources. Generous and consistent support from an institution's alumni base is critical to achieve sound financial performance.

This study reinforced an idea seen throughout the literature, that institutional characteristics in higher education are often highly correlated with one another. Success in one area of an institution might very well predict success in another area as well. This was demonstrated with graduation rate, student debt, institutional size, and alumni giving. This study reveals, graduation rate is the strongest predictor of alumni giving. Conventional wisdom may suggest that graduation rate might serve as a good gauge of an institution's performance on many levels. It would stand to reason that the better a

university is at graduating their students on time the more efficient and effective the entire institution is. Universities need to more fully understand this cyclical nature of current institutional outcomes and their effect on future performance results. As Collins (2005) suggested, the flywheel will begin to move in the right direction. As universities are able to sustain such efforts, the flywheel will begin to gain significant momentum. Ultimately, it is the desire of all institutions to reach a point when the quality of their efforts over time has built a reputation that becomes its own source of momentum.

Implications

Charitable support for colleges and universities is increasingly relied upon to make up budget shortfalls as a result of greater competition among peer institutions and the higher costs of delivering higher education services. For example, the costs of increased regulatory and monitoring requirements seem to be expanding with each academic year. Combining these realities with the growing number of worthy charitable causes seeking philanthropic support and the situation seems even more challenging for university administrators and fundraisers. Making an effective case for support is key regardless of the industry.

For institutions of higher education the value proposition is measured both in the short-term and the long-term. For many constituents, such realities demand performance today, yet philanthropic support from these same constituents may not show up for many years. This delayed return-on-investment can cause university administrators, faculty and staff to miss key correlations between various institutional activities. As determined by this study, an institution's graduation rate is highly predictive of alumni giving. Similarly,

an institution's graduation rate is undoubtedly influenced by a variety of other institutional factors, such as, student selectivity and academic excellence.

The complex nature of higher education reveals vast interdependencies between institutional activities, characteristics, departments, and programs. The quality of these relationships can determine just how successful an institution can be. This study revealed such relationships and their impact on philanthropic giving. The highly correlated results generated by seven of the 10 characteristics studied, demonstrates just how interconnected various higher education activities can be. Understanding these correlations and relationships will assist university administrators in developing strategic initiatives that maximize these relationships.

This study revealed that higher student debt levels result in a lower number of alumni providing philanthropic support. These findings may shed light on the cyclical nature of university momentum. A higher level of philanthropic support for scholarships helps to reduce student debt levels. Likewise, reducing student debt levels should generate higher levels of charitable support over time. This presents further evidence of the momentum surrounding a university's reputation and how a strong reputation assists with attracting more students and greater support. Struggling institutions can experience negative momentum when poor academic outcomes cause further declines in graduation rates and charitable support. Understanding the relationship between student debt levels and alumni giving provides yet another opportunity for universities to maximize current efforts to move the institution toward greater outcomes.

This study revealed a correlation between endowment balances and an institution's alumni giving rate. High endowment levels can often assist in lowering

student debt levels as well. For many institutions, large endowments provide a more predictable level of financial support compared to other forms of philanthropic giving. University administrators and fund-raising professionals are often faced with balancing the need to raise support for current operations and the long-term benefits of raising endowment support. Once again, universities must manage the short and long-term nature of the institution's value proposition. Effectively managing this balancing act can play an important role in ensuring long-term institutional viability.

Institutional size was also determined to impact alumni giving. The strong community cultures found on many smaller campuses may help to generate positive student experiences that result in greater generosity later. These findings may reveal the benefits of creating a more intimate student experience regardless of an institution's size. Further research beyond this study is needed to more closely examine the effects of institutional size on the generation of philanthropic support.

Recommendations

This study focused on institutional results from six consecutive academic years. It is recommended for future researchers to consider expanding the study period. In doing so, new insights might be gained as to the longer-term effects of the business cycle on these institutional characteristics and philanthropic giving. Expanding the study period would also allow for the analysis of any latent return-on-investment results. Researchers may also find it useful to duplicate this study in another 10 to 20 years to determine if graduation rate and student debt remain highly predictive of alumni giving.

While the literature review guided the process of choosing institutional characteristics to be included in the study, countless other characteristics might also

prove to predict philanthropic support. Such institutional characteristics might include: marketing budget, alumni office staff size and composition, alumni relations budget, job placement services, and direct student engagement and satisfaction surveys. Likewise, further research is needed on other donor segments beyond alumni, for example: corporate support, foundations and grants, and giving from non-alumni individuals.

Researchers interested in faith-based colleges and universities might benefit from expanding the study populations beyond the CCCU, in order to include faith-based institutions that are not members of the organization. Further geographic and demographical factors warrant further study as well. While difficult to prove, further research on the causation of philanthropic support is needed. Such specific and targeted findings could prove to have dramatic effects on a university's fund-raising and strategic initiatives. Direct donor surveys of attitudes, perceptions, and intentions toward giving may prove to add valuable insights on the predictive power of various institutional characteristics as well.

This study also seems to confirm two underlying themes, found in the literature, that impact alumni giving: 1. the quality of a person's experience as a student, and 2. the effective engagement of a person as an alumni (Gaier, 2005; Gunsalus, 2005; McDearmon & Shirley, 2009; McDearmon, 2010; and Powell et al., 2012). Graduation rate and student debt both have the potential of impacting these factors. The more effectively university administrators, faculty, and staff deliver high quality student experiences and meaningfully engage the alumni, the more momentum they will build and the higher charitable support they will likely receive. More charitable support will

provide additional resources to provide an even better student experience and stronger connections with an institution's alumni.

Limited industry wide data was available on student engagement. Many institutions choose not to participate in various annual surveys available to colleges and universities, such as the NSSE (Weerts & Ronca, 2009). This lack of participation creates an unfortunate gap in an otherwise extensive data rich industry. It is recommended that institutions commit to participate in these surveys on an annual basis to maximize the industries understanding of the full implications of student engagement on university momentum and philanthropic giving.

Further research is also needed on characteristics involving the impact of various institutional staff positions and volunteer boards on philanthropic giving. Such institutional staff positions might include, chancellor, university president, provost, chief advancement officer, chief alumni relations officer, and chair person of the institutional governing board. Similarly, volunteer boards such as, the university's governing board, foundation board, alumni council, and class representatives need further study to identify potential characteristics that predict fundraising success.

The researcher sought to examine the relationship of institutional characteristics of interest and their potential predictability of alumni giving. The findings suggest graduation rate and student debt are the strongest predictors of alumni giving. University administrators and boards might benefit from using these results to guide strategic planning efforts and to train faculty and staff of the significant correlations between these

and other variables that affect university momentum and alumni giving. Effectively doing so could likely result in more substantial university success and in moving the institutional flywheel forward at greater and greater speeds.

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Appendix A

Institutions Included in the Study

Institutions Included in the Study

Institution	State	Average				
		Alumni Giving Rate	Mid-Point Age	Average Grad. Rate	Average Student Debt	Average Enrollment
Dordt College	IA	34.13	54	62.17	6390.00	1323.83
Taylor University	IN	31.42	163	77.67	6370.00	2060.33
Wheaton College	IL	30.37	149	87.50	6095.00	2756.67
Westmont College	CA	29.33	72	77.00	6313.75	1335.00
Calvin College	MI	27.97	133	75.83	6576.25	3954.83
Goshen College	IN	27.78	115	69.50	6726.50	894.83
Eastern Mennonite University	VA	25.07	92	62.83	7806.50	1247.50
Milligan College	TN	24.37	143	61.50	6829.75	1038.83
John Brown University	AR	23.83	90	66.33	8612.25	1844.50

Northwestern College	IA	22.93	127	62.67	6870.75	1209.17
Covenant College	GA	22.73	54	58.00	6422.75	1215.00
Huntington University	IN	22.40	112	60.00	6321.25	1110.50
Asbury College	KY	22.25	119	68.33	7047.50	1457.83
Roberts Wesleyan College	NY	22.00	143	62.50	9170.75	1680.00
College of the Ozarks	MO	21.15	103	60.67		1350.00
Bluffton University	OH	20.92	110	59.17	8013.75	1058.83
Tabor College	KS	20.87	101	52.00	7526.75	584.00
University of Sioux Falls	SD	20.65	126	49.50	7642.25	1215.67
Houghton College	NY	20.57	126	69.17	7009.25	1260.17
Gordon College	MA	19.17	120	73.00	6496.25	1635.00
Messiah College	PA	19.05	100	75.33	7234.25	2812.17
Lee University	TN	18.5	91	49.33	7527.75	3931.00
Bethel University	MN	17.9	138	72.67	7097.25	3621.83
King College	TN	17.48	142	50.33	5177.75	1768.00

Malone University	OH	17.47	117	58.67	7184.5	2057.33
Grace College and Seminary	IN	17.28	61	56.50	6963.75	1424.33
Whitworth University	WA	17.12	119	76.50	7075.00	2439.33
North Park University	IL	16.88	118	53.83	7913.00	2447.67
Trinity Christian College	IL	16.03	50	59.17	6849.00	1228.83
Lipscomb University	TN	15.67	118	58.83	10434.25	3149.50
Olivet Nazarene University	IL	15.52	102	57.17	8098.00	3515.33
Northwest Nazarene University	ID	15.32	96	52.67	7645.25	1817.17
Sterling College	KS	14.62	122	44.17	7171.50	622.00
Northwestern College	MN	14.40	107	62.50	8242.25	2445.17
Spring Arbor University	MI	13.40	136	56.67	8742.75	3255.67
Oklahoma Christian University	OK	12.98	59	45.00	7066.25	2031.00
Union University	TN	12.93	186	53.83	7462.50	3229.00
York College	NE	12.53	119	35.33	7215.00	434.17
Bryan College	CA	12.08	79	54.67	5917.50	1168.83

Anderson University	SC	11.98	98	46.83	7609.50	2022.00
Indiana Wesleyan University	IN	11.80	89	68.67	8736.25	14595.00
Anderson University	IN	11.70	92	57.50	8461.25	2250.83
Abilene Christian University	TX	11.63	103	58.83	10079.75	4190.83
Cedarville University	OH	11.40	122	68.67	6586.50	3042.00
Point Loma Nazarene University	CA	11.32	107	74.17	7787.00	3051.67
Seattle Pacific University	WA	11.28	118	70.17	6898.25	3560.17
Emmanuel College	GA	11.08	90	36.33	7201.00	689.83
Waynesburg University	PA	11.08	160	56.33	8598.50	1970.33
Bethel College	IN	11.07	62	58.17	7309.00	1712.00
Campbellsville University	KY	11.00	103	39.50	6468.75	2328.17
Geneva College	PA	10.77	161	60.00	7419.00	1806.83
Bluefield College	VA	10.72	87	36.33	8962.00	688.50
Oklahoma Baptist University	OK	10.37	99	54.33	5928.50	1651.17
Oklahoma Wesleyan University	OK	10.35	41	41.83	8108.00	788.17

Biola University	CA	10.27	101	68.33	6080.25	5195.83
Cornerstone University	MI	10.02	68	47.17	7766.75	2189.67
Williams Baptist College	AR	9.93	68	41.33	5445.50	543.50
LeTourneau University	TX	9.92	45	50.67	9562.00	2900.50
Eastern University	PA	9.82	84	63.00	8003.75	3574.67
Belhaven College	MS	9.55	126	45.50	10555.25	2462.17
Oral Roberts University	OK	9.18	44	53.83	10391.75	2901.17
Hope International University	CA	9.15	81	34.67	6186.75	878.17
Corban College	OR	9.15	74	50.33	6680.75	955.83
Trinity International University	IL	8.75	112	53.17	7335.25	1846.17
Mount Vernon Nazarene University	OH	8.75	41	54.50	7664.25	2279.00
Carson - Newman College	TN	8.73	158	52.17	7110.25	1894.17
Vanguard University of Southern California	CA	8.25	89	54.50	8662.75	1776.33
Shorter College	GA	8.07	136	49.33	7553.25	1304.17
Southern Nazarene University	OK	7.78	110	47.67	9125.50	2051.50

Concordia University	CA	7.50	33	56.83	8720.50	2570.83
East Texas Baptist University	TX	7.27	97	37.67	6197.50	1150.00
Charleston Southern University	SC	7.15	45	37.83	7200.25	2758.67
Palm Beach Atlantic University	FL	7.10	41	53.67	7709.75	3054.83
Trevecca Nazarene University	TN	6.85	108	50.00	7182.25	2170.83
MidAmerica Nazarene University	KS	6.65	43	51.00	8231.50	1530.50
George Fox University	OR	6.60	124	63.83	7630.50	2661.33
Warner Pacific College	OR	6.53	72	50.67	9026.50	1132.17
Judson University	IL	6.30	96	52.83	8282.00	1014.00
Univ. of Mary Hardin-Baylor	TX	6.18	164	45.67	8470.75	2675.17
Howard Payne University	TX	6.12	20	40.50	6689.75	1104.17
Mississippi College	MS	6.05	183	56.83	7849.00	4140.50
University of Mobile	AL	5.35	48	45.17	8407.75	1441.50
Regent University	VA	5.08	31	34.50	9171.25	3275.83
Hannibal - LaGrange College	MO	4.68	151	47.50	7402.25	990.17

North Greenville University	SC	4.40	118	48.83	6683.50	2048.50
California Baptist University	CA	4.18	59	56.67	9593.75	4063.17
Southeastern University	FL	2.60	74	44.00	10258.75	2580.33
University of the Southwest	NM	2.20	47	34.33	7714.25	463.00
Faulkner University	AL	2.12	67	31.00	6129.50	2738.67
Houston Baptist University	TX	1.95	49	45.83	7093.50	2248.83

Appendix B

Descriptive Statistics for Endowment Balance

Descriptive Statistics for Endowment Balance^a

Year	<i>N</i>	Minimum	Maximum	Mean	Std. Deviation
2007	90	.617	366.239	42.34	66.88
2008	90	.560	352.924	41.22	63.90
2009	89	.480	255.133	33.44	49.39
2010	90	1.640	277.382	36.42	52.74
2011	90	1.812	330.524	42.42	61.28
2012	89	1.850	312.923	42.00	58.88

^a Endowment Balance: Dollar amounts in millions

Appendix C

Descriptive Statistics for Enrollment

Descriptive Statistics for Enrollment

Year	<i>N</i>	Minimum	Maximum	Mean	Std. Deviation
2007	90	380	14,148	2,098	1,621
2008	90	381	14,627	2,132	1,663
2009	90	421	14,463	2,174	1,649
2010	90	442	14,921	2,227	1,703
2011	90	451	14,835	2,236	1,704
2012	90	454	14,576	2,236	1,707

Appendix D

Descriptive Statistics for Financial Responsibility Score

Descriptive Statistics for Financial Responsibility Score

Year	<i>N</i>	Minimum	Maximum	Mean	Std. Deviation
2007	90	.6	3.0	2.66	.50
2008	90	-.2	3.0	2.36	.73
2009	90	.4	3.0	2.08	.66
2010	90	.4	3.0	2.40	.70
2011	90	.6	3.0	2.61	.53
2012	87	.4	3.0	2.46	.55

Appendix E

Descriptive Statistics for Graduation Rate

Descriptive Statistics for Graduation Rate

Year	<i>N</i>	Minimum	Maximum	Mean	Std. Deviation
2007	89	26	86	54.34	12.45
2008	89	22	86	55.65	11.99
2009	89	4	88	55.47	13.57
2010	89	29	94	56.33	12.55
2011	90	18	87	54.99	13.10
2012	90	22	90	55.32	12.70

Appendix F

Descriptive Statistics for Retention Rate

Descriptive Statistics for Retention Rate

Year	<i>N</i>	Minimum	Maximum	Mean	Std. Deviation
2007	90	33	96	73.39	10.49
2008	89	55	97	74.34	8.80
2009	90	33	96	73.58	9.17
2010	90	59	95	74.17	7.94
2011	90	49	95	73.72	9.00
2012	90	48	95	74.20	9.94

Appendix G

Descriptive Statistics for Student Loan Default Rate

Descriptive Statistics for Student Load Default Rate

Year	<i>N</i>	Minimum	Maximum	Mean	Std. Deviation
2007	90	0.00	10.30	3.07	2.12
2008	90	0.00	16.80	3.54	2.80
2009	90	0.00	14.00	4.29	2.58
2010	90	0.00	12.10	4.69	2.71
2011	90	0.00	13.30	4.53	2.50

Appendix H

Descriptive Statistics for Student Debt

Descriptive Statistics for Student Debt

Year	<i>N</i>	Minimum	Maximum	Mean	Std. Deviation
2009	89	1,783	11,539	7,307.26	1,600.39
2010	89	3,605	11,373	7,715.85	1,518.51
2011	89	2,867	11,749	7,724.64	1,527.32
2012	89	5,336	11,376	7,597.45	1,146.65

Appendix I

Descriptive Statistics for Student Selectivity

Descriptive Statistics for Student Selectivity

Year	<i>N</i>	Minimum	Maximum	Mean	Std. Deviation
2007	79	21	31	25.78	2.04
2008	80	20	31	25.86	2.09
2009	82	17	35	26.16	2.51
2010	85	23	32	26.27	1.92
2011	84	21	32	26.13	2.01
2012	84	21	32	26.20	1.94